



SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation

**Federal Aviation
Administration**

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<http://www.faa.gov/aircraft/safety/alerts/SAIB>

This is information only. Recommendations aren't mandatory.

Today, July 20, 2006, we have corrected the "Alert Telex No. in this SAIB. All other information remains the same.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts owners and operators of **Eurocopter France (ECF) Model AS350 B3 helicopters** fitted with twist grip post-MOD 073084 of a potential manual mode throttle training issue that has been identified by Eurocopter.

The target audience for this SAIB is the pilot community.

Reference: Eurocopter Documents

ALERT TELEX	No. 05.00.44
Service Letter	No. 1702-71-05

Background

During a recent investigation of an ECF Model AS-350B3 training accident we discovered that an operator was performing prolonged emergency governing training operations. While the pilot was in manual mode the twist grip rotation was limited.

The twist grip design incorporates a pin that is extended while the aircraft is in the automatic FADEC mode to limit travel of the twist grip and prevent inadvertent exceedance of the engine temperature during start. When the manual mode is activated a solenoid is energized to retract the pin, allowing full rotation of the twist grip. Prolonged and/or

repeated manual mode operations will cause the solenoid to over heat and can cause the pin to bind in the extended position. If this occurs the pin will not retract when manual mode is activated, limiting needed rotation of the twist grip past the VOL/FLIGHT position while in emergency manual mode. Eurocopter Alert Telex No. 05.00.44 and Service Letter No. 1702-71-05 address this issue; however, these documents are historically retained in the maintenance documents and not readily available to pilots. Eurocopter is actively working on getting this information to the pilot community as well as certifying a new lock pin solenoid that should eliminate potential lock pin issues.

Recommendations

We strongly recommended that operators, pilots, flight instructors, and mechanics of post-MOD073084 AS-350 B3 helicopters:

- Review Eurocopter Alert Telex No. 05.00.44 and Service Letter No. 1702-71-05 to become aware of the proper use of manual mode (or emergency governing operations).
- Do not exceed 15 minutes of continuous solenoid operation during maintenance OR TRAINING operations.
- Wait at least 15 minutes between operation of the solenoid ("AUTO/MAN" governing mode

selector set to "MAN") if training in manual mode.

- Use an experienced instructor when training for total governor failure.
- Conduct training at a safe altitude that will allow time for Auto mode reversion if necessary.
- Switch back to "AUTO" if difficulty is encountered during operation in the manual mode.

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